DIVISION 7 THERMAL AND MOISTURE PROTECTION

07580 VINYL SIDING AND CLADDING

PART 1 – GENERAL

1.1 WORK

- A. Work includes all labor and materials required to complete the work as listed on the **Scope** and specified herein
- B. Where additional instruction is required, work shall be as directed by the **Inspector**.
- C. When siding work involves removal or disturbance of painted or otherwise coated surfaces work shall comply with Section 01810 Lead Dust Hazards.

1.2 QUALITY STANDARDS

- A. Provide skilled, trained, experienced and competent workers to complete the work as specified.
- B. Provide a certified lead abatement supervisor and certified lead abatement workers to perform siding demolition, including clean up and debris removal per Section 01810 Lead Dust Hazards.
- C. All work shall be completed in accordance with the "Vinyl Siding Installation Manual" published by the National Housing Center, updated October 2004 (www.vinylsiding.org), manufacturer's specifications, and as specified herein.
- D. Siding installation shall comply with all state and local building codes.

1.3 SUBMITTALS

- A. **Contractor** shall obtain a Siding Permit from the City of Milwaukee Department of City Development Permit Center (809 N. Broadway, 1st floor) prior to starting work when the Scope calls for a complete siding installation or replacement. Minor siding repairs do not require a permit.
- B. Submit a copy of the siding permit to the **Agency**.
- C. Contractor shall notify the Milwaukee Health Department (MHD) Lead Section (414-286-5033) at least 24 hours prior to starting any work that involves disturbance of painted or otherwise coated surfaces. MHD will assign a Lead Risk Assessor to monitor the work to document lead safe rehabilitation procedures were followed.

1.4 MATERIALS HANDLING AND STORAGE

- A. Provide all materials required to complete the work.
 - Materials and products delivered will be certified by the manufacturer to be as specified.
 - Do not install any used, damaged, defective or unsatisfactory materials.

B. Handling:

- Deliver and transport materials to avoid damage to the product or to any other work.
- Keep all materials to be installed dry.

C. Storage:

- Store materials off the ground, protected from dirt, ground moisture, contaminants, and weather.
- Neatly stacked to prevent damage.
- Protected from occupant and construction traffic.
- Stored with level support to prevent twisting, cupping, or warping.

1.5 PRECONSTRUCTION AND PREPARATION

- A. Examine and verify that job conditions are satisfactory for speedy and acceptable work.
 - Check that weather conditions will be acceptable for work.
 - Provide proper containment measures as outlined in Section 01810 Lead Dust Hazards.
 - Provide lifts, cranes, ladders or scaffolding to assist high-level siding work.
 - Have on hand and ready for installation in coordination with siding, all flashing, vents, building energy wrap, insulation board, and fasteners.

PART 2 - MATERIALS

2.1 SIDING

- A. Provide rigid vinyl, extruded polyvinyl chloride minimum .044 inch thick, wood grain or embossed finish horizontal bevel profile and color selected by **Owner**.
- B. Provide accessories of extruded plastic or polyvinyl chloride same material and color as siding:
 - Internal corners
 - External corners
 - Cap strip
 - Drip cap
 - Undersill trim
 - Starter strip
 - Window and door trim (J-Channel)
- C. When required by manufacturers or specified in the **Scope** use exterior wall sheathing paper:
 - 15# asphalt-saturated felt.
 - Non-woven, spun-bonded olefin sheet air barrier system, i.e Tyvek, Typar, or similar.
 - Solid insulation board or fan fold insulation (1/4" minimum or sized per siding manufacturer's specification).
- D. Metal aluminum trim (sheet goods), minimum of .032 inch thick, standard color selected by **Owner**.
- E. Use corrosion resistant fasteners as specified by siding manufacturer and local building code.
- F. Flashing shall be non-corrosive sheet metal or aluminum.
 - 24 gauge hot-dip galvanized steel sheet.
 - 0.032 inch aluminum.

PART 3 - INSTALLATION

3.1 PREPARATION OF WALL

- A. Prepare exterior walls for siding application:
 - Nail down loose boards of existing siding, and replace any rotten boards. Do not install vinyl siding over rotting wood.
 - Remove drip caps, corner boards or other architectural components to provide a flat surface for siding installation.
 - Remove loose caulk and re-caulk around windows, doors, and other areas to protect from moisture penetration.
 - Remove all protrusions such as gutters, downspouts, wires, light fixtures, etc.
 - Check all walls for evenness and install furring strips where necessary. When installing furring strips, please take appropriate measures to establish a smooth and continuous surface.

NOTE: In cases where the lower portion of a horizontal siding panel must be trimmed so that it may be installed over steps, porches, etc., the panel should be built out ("furred") for proper angle and rigidity. Utility trim can be used to seal the cut edge of the panel and then secured to the wall.

- B. Prepare fascia, and other trim for installation of cladding.
 - Nail loose fascia, soffit, rake, crown, and other trim.
 - Replace any rotten boards. Do not install cladding over rotting wood.
 - Remove all protrusions such as gutters, downspouts, wires, light fixtures, etc. as necessary to install cladding.

3.2 UNDERLAYMENT

- A. When the use of an underlayment material is required per the siding manufacturer's instructions and a specific product is not listed by the siding manufacturer, or listed on the **Scope**, the **Contractor** may choose to install either of the following options (B or C).
- B. Install 15# asphalt-saturated roofing felt.
 - Install one layer of roofing felt over entire wall area.
 - Run sheets horizontally lapped so water sheds.
 - Nail in place per manufacturer's instructions and as specified herein.

- C. Install building wrap horizontally by nailing and lapping edges a minimum of 6 inches in accordance with manufacturer's instructions.
- D. Install solid installation board fastened securely to wall with tight joints.

3.3 FLASHING

- A. Before installing siding, make sure that flashings are installed to prevent moisture from entering the wall and roof spaces Refer to Section 07600 Flashing and Sheet Metal.
 - Provide compatible flashing materials.
 - Complete flashings as required during and at the conclusion of siding.
 - Install drip edges, z-flashing, and other flashing as recommended by the siding manufacturer.

3.4 SIDING INSTALLATION

- A. Install vinyl siding in accordance with manufacturer's printed installation instructions:
 - Replace defective wall sheathing as necessary to provide a structurally sound wall surface.
 - Be sure that installed panels can move freely from side to side, allowing for expansion and contraction of the panel.
 - When installing a panel, push up from the bottom until the lock is fully engaged with the piece below it. Without stretching the panel, reach up and nail it in place.
 - Install siding in such a way as to minimize the number of joints, seams, and edges. Use full length panels wherever possible.
 - Overlap adjacent panels per manufacturer's instructions. Place visible ends away from the front of the property.
 - Place nails or other fasteners in the center of the nailing slot.
 - Fasteners shall be of sufficient length to adequately penetrate the wall.
 - Do not force the panels up or down when fastening in position. Allow each panel to hang without strain.
 - Do not drive the head of the nail tightly against the siding nail hem. Allow 1/32" (about the thickness of a dime) clearance between the fastener head and the siding panel. Drive nails straight and level to prevent distortion and buckling of the panel.
 - Leave a minimum of ¼" clearance at all openings and stops to allow for normal expansion and contraction. When installing in temperatures below 40 degrees Fahrenheit, increase minimum clearance to 3/8".
 - Do not caulk the panels where they meet the receiver of inside corners, outside corners, or J-channel trim. Do not caulk the overlap joints.
 - Do not face-nail or staple through the face of the siding.
 - Remove gutters, downspouts, electrical conduit, wires, etc. to allow for the installation of the siding. Reattach all items after siding installation is complete.
 - All caulking shall match material color and be applied so as to present a neat appearance.
- B. Install trim in accordance with manufacturer's instructions:
 - Make all corners, bends, and creases crisp and straight. Use a siding brake or similar equipment.
 - Joints at corners, ends, etc. shall be folded to present a finished surface not a raw edge.
 - Trim shall be installed continuous over each horizontal or vertical member to minimize the number of joints.
 - Trim fasteners shall be placed (whenever possible) in hidden locations.
 - Trim fasteners shall be of non-corrosive material and of sufficient length to adequately secure trim materials.
 - Do not install trim over rotten or defective wood. Rotten and defective wood shall be replaced prior to installation of trim.
 - Trim applied to window openings must be continuous and cover the exterior blind stop.
 - Windowsill covering shall be continuous to interior sill edge and cover the exterior sill completely with drip edge below sill.
 - Fascia and soffit trim shall be installed per manufacturer's instructions using manufactured soffit material.
 - Fascia and soffit trim shall provide complete coverage of all exposed trim. If necessary contractor shall install drip edge trim at roofline.
 - Soffit trim shall be vented as necessary to allow for sufficient airflow in attics.
 - All caulking shall match material color and be applied so as to present a neat appearance.

3.5 INSPECTION AND CLEAN-UP

A. Cleaning and repairs:

- Clean up shall be in accordance with Section 01810 Lead Dust Hazards.
- At completion of work, clean the work area and remove all scrap and excessive materials.
- Repair or replace defective work as directed by the **Inspector**.

END OF SECTION - 07580 VINYL SIDING AND CLADDING